Unfortunately, specimens of *Glaziou 8058* lack certain diagnostic structures to conclusively place them under *S. coronata*. For instance, there are no petioles (in *S. coronata* they are armed with flat spine-like margins), no fruits, and the spadices are incomplete. The size and shape of the female flowers, the width and clustering of the pinnae, and the length of the individual rachillae, however, compare very favorably with specimens of *S. coronata*.

Syagrus romanzoffiana (Chamisso) Glassman, comb. nov. Figures 10 and 14. *Cocos romanzoffiana* Chamisso, Choris Voyage Pitt. 5–6, *t. 5–6*. 1822. *Arecastrum romanzoffianum* (Chamisso) Becc., L'Agric. Colon. **10**: 447. 1916. *A. romanzoffianum* var. *genuinum* Becc., l.c. 455. *t. 1–2, 3*, fig. 7. 1916. *A. romanzoffianum* var. *genuinum minus* Becc., l.c. 456, *t. 3*, fig. 8. 1916. *A. romanzoffianum* var. *australe* (Martius) Becc., l.c. 459, *t. 3*, figs. 2–6. 1916. *C. australis* Martius, Palmet. Orbign. 95, *t. 1*, fig. 2, *t. 30C*. 1844. *A. romanzoffianum* var. *micropindo* Becc., l.c. 462, *t. 3*, fig. 1. 1916. *C. arechavaletana* Barb. Rodr., Contr. Jard. Bot. Rio de Jan. **2**: 43. 1901. *C. acrocomioides* Drude, Mart. Fl. Bras. **3**: 409, *t. 87*, fig. 3. 1881. *?C. martiana* Drude & Glaziou ex Drude, Mart. Fl. Bras. **3**: 418, *t. 88–89*. 1881. *C. plumosa* Hooker, Bot. Mag. **86**: *t. 5180*. 1860. *C. geriba* Barb. Rodr., Prot. App. 43. 1879. *C. datil* Griseb. & Drude, Symbol. Flor. Argent. 283. 1879.

In a recent article (Glassman, 1965), I questioned the wisdom of segregating genera in the *Syagrus* alliance on the basis of fruit and seed characters alone. The genus *Arecastrum* Becc. is based on the very irregular endocarp cavity and irregular, gibbous-uncinate seed. It is true that these are distinctive characteristics, but the fruits and seeds within the genus *Syagrus* are quite variable. *S. inajai* (Spruce) Becc. has a fruit with an irregularly triangular endocarp cavity and seed three lobed in cross-section; and four species, *S. archeri* Glassman, *S. graminifolia* (Drude) Becc., *S. campicola* (Barb. Rodr.) Becc., and *S. leptospatha* Burret, have fruits which are 1–2-chambered with as many seeds. If the fruits and seeds are used as a basis for splitting up *Syagrus* into separate genera, then other characteristics also could be used. About two-thirds of the species have clustered pinnae, the other third unclustered pinnae. Unclustered pinnae is one of the characteristics of the genus *Butia* Becc. Several species, e.g., *S. vagans* (Bondar) Hawkes, *S. camposportoana* (Bondar) Glassman,

FIG. 10. *Syagrus romanzoffiana*. Minas Gerais, Fazenda Pecegueiro, North of Bragança. Photo by Glassman.

S. coronata (Martius) Becc., *S. tostana* (Bondar) Glassman and *Arikuryroba schizophylla* (Martius) Bailey, have petioles with spiny or spine-like margins which is also characteristic of the genus *Butia*. A number of species are acaulescent, but a majority of the taxa have definite trunks. Most of the species have branched spadices, but some, e.g., *S. campicola, S. leptospatha, S. petraea, S. glazioviana,* and *S. acaulis* (Drude) Becc. have simple, unbranched spadices. The acaulescent habit and unbranched spadices are also found in the genus *Allagoptera* Nees.

At the present time, a more reasonable approach would be to divide *Syagrus* into various subgenera and sections and use several characteristics to tie them all together. This has been done to a limited extent by others, especially Drude (1881); however, I plan to make further changes and subdivisions before I complete my revision of the genus *Syagrus*.

In Brazil, there is good evidence to show that *S. romanzoffiana* hybridizes with *S. coronata* in the state of Bahia and with *S. oleracea* (Martius) Becc. in the state of São Paulo. In addition to this, hybrids between *S. romanzoffiana* and various species of *Butia* have been reported by Barbosa Rodrigues (1903), Beccari (1916), Bailey (1936), and Bondar (1964).

Division of *S. romanzoffiana* into varieties by Beccari (1916) is not very satisfactory. Even though this species has a wide range of distribution (northern Brazil to Uruguay), differences in size and shape of the fruit and size of the tree is too variable to consider clear-cut varieties. In general, fruits are 2.0–2.6 cm. long and 1.2–1.7 cm. in diameter, but many of the fruits collected from cultivated plants are longer (up to 3.0 cm. long) and broader (up to 2.4 cm. in diameter).

A. romanzoffianum var. *botryophorum* (Martius) Becc. has been transferred to *Syragrus botryophora* (Glassman, 1965) and var. *ensifolium* has been placed provisionally under *S. coronata,* as previously mentioned.

The holotype of *Cocos plumosa* (*Kew Gardens 22-44164,* K) has fruits 2.7 cm. × 2.1 cm., but the larger size may be due to cultivation. Some specimens in the type collection of *Cocos martiana* (*Glaziou 8056,* cult. Rio de Janeiro, G) have female flowers 6–7 mm. long and pinnae up to 3.8 cm. wide, both larger than average. Illustrations of fruits by Drude (1881, *t. 89*) resemble *S. romanzoffiana* closely. In their description, Drude and Glaziou state that the fruits are 2.5–3.0 cm. × 1.5 cm., and the tree is up to 20 m. tall. Here again, cultivation may account for the larger than normal size.